

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Vidya Bhushan Lohray, et al.

Serial No.:

Group No.:

Filed:

Examiner.:

For: HETEROCYCLIC COMPOUNDS, PROCESS FOR THEIR  
PREPARATION AND PHARMACEUTICAL COMPOSITIONS  
CONTAINING THEM AND THEIR USE IN THE TREATMENT OF  
DIABETES AND RELATED DISEASES

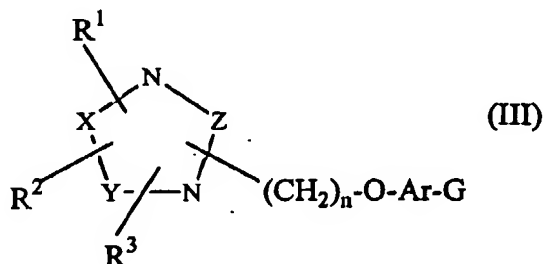
Attorney Docket No.: U 014850-7

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

PRELIMINARY AMENDMENT

In the Claims

1. (Previously Presented) An intermediate of formula (III)



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where G represents -CHO, -NH<sub>2</sub>, -CH=NOH, -CH<sub>2</sub>NHOH, -CH<sub>2</sub>N(OH)CONH<sub>2</sub> or -CH<sub>2</sub>CH(J)-COOR, wherein J represents hydroxy or halogen atom and R represents hydrogen, or lower alkyl group; and of X, Y and Z represents a group C= and the other of the remaining of X, Y or Z represents C=C; with a proviso that when cyclic structure represented by X, Y and N form a pyrimidinone group, G does not represent CHO, R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> are the substituents either on X, Y or Z or on a nitrogen atom and are the same or different and represent hydrogen atom, halogen, hydroxy or nitro, or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, selected from acetyl, propionyl or benzoyl; acyloxy selected from acetyloxy, propionyloxy, or benzoyloxy; hydroxyalkyl, amino, acylamino, arylamino, aminoalkyl, aryloxy, alkoxycarbonyl, alkylamino, alkoxyalkyl, thioalkyl, alkylthio or carboxylic acid or its amides or sulfonic acid or its amides with the provision that when R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> is on a nitrogen atom it does not represent hydrogen, halogen, hydroxy, nitro; or substituted or unsubstituted aryloxy, alkoxy, cycloalkoxy, acyloxy selected from acetyloxy, propionyloxy, or benzoyloxy; alkylthio, carboxy or sulfonic acid groups; or any two of R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> along with the adjacent atoms to which they are attached may form a substituted or unsubstituted cyclic structure of 4 to 7 atoms, with one or more double bonds, which are carbocyclic or optionally contain one or more heteroatoms selected from oxygen, nitrogen and sulfur; the linking group represented by -(CH<sub>2</sub>)<sub>n</sub>-O- is attached either through nitrogen atom or through X, Y or Z, where n is an integer ranging from 1-4; and Ar represents an optionally substituted divalent aromatic or heterocyclic group.

2. (Previously Presented) A pharmaceutical composition which comprises, a compound according to claim 1 as an effective ingredient and a pharmaceutically acceptable carrier, diluent or excipient.

3. (New) A compound selected from the group consisting of:

4-[2-[4-oxo-3,4-dihydro-3-quinazolinyl]ethoxy]benzaldehyde,

4-[2-[2-Methyl-4-oxo-3,4-dihydro-3-quinazolinyl]ethoxy]benzaldehyde,

4-[2-[2-Ethyl-4-oxo-3,4-dihydro-3-quinazoliny]ethoxy]benzaldehyde,  
 4-[2-[8-Aza-2-methyl-4-oxo-3,4-dihydro-3-quinazoliny]ethoxy] benzaldehyde,  
 4-[[3-Methyl-4-oxo-3,4-dihydro-2-quinazoliny]methoxy]benzaldehyde,  
 4-[[3-Ethyl-4-oxo-3,4-dihydro-2-quinazoliny]methoxy]benzaldehyde,  
 4-[[1-methyl-4-oxo-1,4-dihydro-2-quinazoliny]methoxy]benzaldehyde,  
 3-Methoxy-4-[[3-Methyl-4-oxo-3,4-dihydro-2-quinazoliny]methoxy]  
 benzaldehyde,  
 4-[2-[2-Ethyl-4-methyl-6-oxo-1,6-dihydro-1-pyrimidinyl]ethoxy]benzaldehyde  
 oxime,  
 N-[4-[2[2-Ethyl-4-methyl-6-oxo-1,6-dihydro-1-pyrimidinyl]ethoxy]benzyl]N-  
 hydroxyurea,  
 4-[2-[2-Ethyl-4-methyl-6-oxo-1,6-dihydro-1-pyrimidinyl]ethoxy]aniline,  
 4-[2-[2-Ethyl-4-oxo-3,4-dihydro-3-quinazoliny]ethoxy]aniline,  
 Ethyl 2-bromo-3-[4-[2-[2-ethyl-4-methyl-6-oxo-1,6-dihydro-1-  
 pyrimidinyl]ethoxy]phenyl]propanoate,  
 Ethyl 2-bromo-3-[4-[2-[2-ethyl-4-oxo-3,4-dihydro-3-quinazoliny]ethoxy]  
 phenyl] propanoate,  
 3-[4-[2-[2-Ethyl-4-methyl-6-oxo-1,6-dihydro-1-pyrimidinyl]ethoxy]phenyl] -2-  
 hydroxypropanoic acid,  
 Ethyl 3-[4-[2-[2-ethyl-4-methyl-6-oxo-1,6-dihydro-1-pyrimidinyl]ethoxy]  
 phenyl]-2-hydroxypropanoate,  
 4-[2-[2,5,6-Trimethyl-4-oxo-3,4-dihydro-thieno-[2,3-d]pyrimidin-3-yl]ethoxy]  
 benzaldehyde,  
 4-[2-[2-Methyl-4-oxo-3,4-dihydro-3-quinazoliny]ethoxy]aniline, and  
 Ethyl 2-bromo-3-[4-[2-[2-methyl-4-oxo-3,4-dihydro-3-  
 quinazoliny]ethoxy]phenyl]propanoate.